# **SNF Stabilization and Disposition (RL-0012)**

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KBC Project — Multi-Canister Overpack on Trailer

Sludge Treatment Project – K West Container Sludge Sampling Tube



### **Overview**

This section addresses work in Project Baseline Summary (PBS) RL-0012, *Spent Nuclear Fuel (SNF) Stabilization and Disposition.* There are three major components to this work scope:

- K Basins Closure Project (KBC) [M. W. Peres].
- Sludge Treatment Project (STP) [D. G. Ruscitto].
- K East Basin Deactivation and Decommissioning (D&D) [R. E. Wilkinson].

NOTE: Unless otherwise noted, all information contained herein is through May 2008.

## **Notable Accomplishments**

#### K East D&D Project (D&D)

- Started demolition of the Fuel Transfer System (FTS) annex and initiated packaging for shipment.
- Completed the thermal system insulation (TSI) asbestos abatement area and F-G column line area.
- Completed isolation of the service water.
- Completed demolition preparation activities in the office area.

### K Basins Closure Project – Legacy Fuel Removal

- Completed debris sorting in West Bay.
- Completed Cold Vacuum Drying (CVD)/K West Startup maintenance.
- Completed Multi-Canister Overpack (MCO) training run.
- Initiated MCO dry runs.
- Completed shipping 4 IP-II containers (200 m3) of CERCLA waste to the Environmental Restoration Disposal Facility (ERDF).
- Completed installing grout ports in CERCLA waste wood boxes.

### **Sludge Treatment Project (STP)**

- Submitted One Time Request for Shipment (OTRS) document to RL for approval.
- Received RL's approval on the seismic design methodology documents.
- Completed review of the test plan for the tank overflow/filter test.
- Procured the tank overflow/filter test equipment.

### **Issues**

#### **K East D&D Project**

None at this time.

### **K Basins Closure Project**

- Potential delays/repair turnaround timeframe for any major fuel processing equipment failures.
- Maintaining staff that have received training and attained qualification at K West and the CVDF.

#### **STP**

- Central Characterization Project (CCP) contracted with Waste Isolation Pilot Plant (WIPP); liaison impacts design (shifting Waste Acceptance Criteria [WAC] direction from DOE).
- Addressing potential for new Remote-Handled Transuranic (RH-TRU) waste storage facility.

# FY 2008 Funds vs. Spend Forecast (\$M)

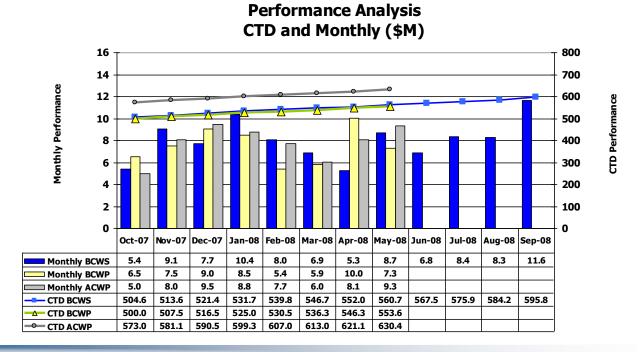
	Projected FY 2008 Funding	FY 2008 Fiscal Year Spending Forecast	Variance
SNF Stabilization & Disposition	\$ 107.6	\$ 108.8	\$ -1.2

**Schedule/Cost Performance (\$M)** 

SNF Stabilization & Disposition	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion (FY08/ CTD)
Current Period (Month)	\$8.7	\$7.3	\$9.3	-\$1.4	-16.5%	-\$2.1	-28.2%	\$96.7
Cumulative-to-Date (FY 2004 - Present)	\$560.7	\$553.6	\$630.4	-\$7.1	-1.3%	-\$76.8	-13.9%	\$595.8

Numbers are rounded to the nearest \$0.1M and include the closure services allocation.

- CTD Schedule Performance (-\$7.1M/-1.3%): Unfavorable SV is due to: delays in the STP due to slow start to PNNL activities to receive container samples, Settler Tank material behind schedule, and Knock-out Pot retrieval design did not start as soon as planned; delays in Legacy Fuel work scope (equipment maintenance and systems readiness), and K East to K West Sludge Transfer System D&D; and also delays approving Authorization Basis changes and coordination with other D&D activities. K East D&D demolition mobilization activities have been delayed by delays in completing dewatering.
- **CTD Cost Performance (-\$76.8M/-13.9%):** The unfavorable CV is primarily due to problems encountered in design, implementation, startup, and operation of spent fuel removal, sludge containerization, and transfer systems. System complexity and requirements were underestimated. Most of the cost variances were incurred prior to FY 2006.



### **Milestone Achievement**

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones and Defense Nuclear Facilities Safety Board (DNFSB) commitments represent significant events in project execution. DOE Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The FY 2008 Enforceable Agreement milestone/DNFSB commitment information provided herein is based upon the current baseline including RL-approved changes. Changes from month-to-month in both the total number of milestones to be completed and in the forecast status of upcoming milestones are the result of BCRs approved during the reporting period.

Number	Title	Type (TPA/PI/ DNFSB)	Due Date *	Actual Date	Forecast Date	Status / Comments
M-034-33B (S10-05-018)	Complete K East Sludge Containerization	TPA	03/01/05	10/20/06		Complete
DNFSB 119E (S10-05-014)	Complete K East Bulk Sludge Consolidation	DNFSB	10/31/06	10/20/06		Complete
M-034-34 (S10-05-010)	Complete Removal of K East Sludge	TPA	05/31/07	05/31/07		Complete
DNFSB 120E (S10-05-015)	Complete K East Basin Containerized Sludge Removal	DNFSB	05/31/07	05/31/07		Complete
DNFSB 122E	K East Final Pass Sludge Removed	DNFSB	05/31/07	05/31/07		Complete
M-034-35a (S10-05-011)	Containerize K West Bulk Sludge	TPA	07/31/07	07/03/07		Complete
DNFSB 119W (S10-05-016)	Complete K West Bulk Sludge Containerization	DNFSB	07/31/07	07/03/07		Complete
M-034-35b (S10-05-011)	Complete K West Final Pass	TPA	01/31/08	12/27/07		Complete

<sup>\*</sup> DNFSB dates reflect Implementation Plan update, TPA dates reflect change package M-34-05-04.